Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016

Subject Code: 2722312 **Date: 27/05/2016**

Subject Name: Wireless Adhoc Network

Time:10:30 am to 01:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Give the differences between cellular networks and ad hoc wireless networks.	**07**
	(b)	Write a short note on TCP over Ad Hoc Wireless Networks.	**07**
Q.2	**(a)**	Write a short note on Ad Hoc Wireless Internet.	**07**
	(b)	Explain how security provisioning in ad hoc wireless networks differs from that in infrastructure-based networks? Write a short note on Key Management in Adhoc Wireless Networks.	**07**
		OR	
	(b)	Explain Security Attacks in Adhoc Wireless Networks.	**07**
Q.3	**(a)**	What are the disadvantages of the binary exponential back-off mechanism used in MACA? How are they overcome in MACAW?	**07**
	(b)	Explain Five phase Reservation MAC protocol.	**07**
		OR	
Q.3	**(a)**	Discuss issues in Designing a MAC protocol for Ad hoc Wireless Network.	**07**
	(b)	Explain the receiver-initiated MAC protocols MACA-BI and MARCH.	**07**
Q.4	**(a)**	Explain Adhoc On-demand Distance Vector (AODV) Routing Protocol in detail.	**07**
	(b)	Explain Location-Aided Routing (LAR) protocol. What are the key differences between the LAR1 and the LAR2 algorithms?	**07**
		OR	
Q.4	**(a)**	Explain Destination Sequenced Distance-Vector (DSDV) Routing Protocol in detail.	**07**
	(b)	Discuss Issues in Designing a Multicast Routing Protocol.	**07**
Q.5	**(a)**	Discuss the Need for energy Management in Ad Hoc Wireless Networks.	**07**
	(b)	Explain QoS Solutions at Network layer.	**07**
		OR	
Q.5	**(a)**	Describe the Classification of energy management schemes in brief.	**07**
	(b)	Discuss Issues and Challenges in providing QoS in Adhoc wireless Networks.	**07**

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